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| APPLICATION NO.   | FILING DATE     | FIRST NAMED INVENTOR  | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|-----------------------|---------------------|------------------|
| 10/706,536  | 11/12/2003      | Nicholas V. Perricone | 00961-P0243B 6897   |                  |
| 24126   | 7590 03/31/2005 | EXAMINER              |                     | INER             |
| ST. ONGE STEWARD JOHNSTON & REENS, LLC<br>986 BEDFORD STREET<br>STAMFORD, CT 06905-5619 |                 |                       | TANG, SON M         |                  |
|   |                 |                       | ART UNIT            | PAPER NUMBER     |
|   |                 |                       | 2632                |                  |

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.  | Applicant(s)           |  |  |  |
|---|--|------------------------|--|--|--|
|   | 10/706,536   | PERRICONE, NICHOLAS V. |  |  |  |
| Office Action Summary   | Examiner   | Art Unit               |  |  |  |
|   | Son M Tang   | 2632                   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |                        |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by-statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                        |  |  |  |
| Status  |  |                        |  |  |  |
| 1) Responsive to communication(s) filed on 12 N   | 1)⊠ Responsive to communication(s) filed on <u>12 November 2003</u> .  |                        |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.   |                        |  |  |  |
|   | Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |                        |  |  |  |
| Disposition of Claims   |  |                        |  |  |  |
| 4) Claim(s) 1-29 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-29 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  |  |                        |  |  |  |
| Application Papers  |  |                        |  |  |  |
| 9) The specification is objected to by the Examiner.  |  |                        |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |  |                        |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |                        |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |                        |  |  |  |
| Priority under 35 U.S.C. § 119  |  |                        |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.   |  |                        |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6/11/04.  | 4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal Pa  |                        |  |  |  |

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1- 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sleichter, III et al. [US 6,744,370; Sleichter] in view of Strumolo et al. [US 6,831,572; Strumolo].

Regarding to claims 1, 10, 21 and 22-23: Sleichter discloses a threat detection interface system for providing an alert to an operator of a vehicle relating to a threat identified by a threat detection system comprising:

-a control interface 37 coupled to the threat detection system 43 for resolving a threat detection signal;

-a plurality of vibrator units (12, 12' see Fig. 7) in tactile communication with the operator, said plurality of vibratory units being coupled to said control interface 37; and a control signal 111 generated by said control interface 37 for controlling said plurality of vibrator units based upon a determined direction of the identified threat relative to the vehicle [as shown in Fig. 1, 7-8, col. 6, lines 1-10, col. 7, lines 1-10, col. 22, lines 1-40 and col. 24, lines 129], Sleichter does not specifically disclose the threat is based upon a determined distance of the identified thread relative to the vehicle. It is known in the art that, to determine the potential collision with other object relative to the vehicle, the distance to the object and speed of the vehicle must be determined by the radar, Strumolo teaches a vehicle collision warning system that warns operator

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of a potential collision, the warning information include direction, time and distance of the collision [as cited in col. 5, lines 8-13]. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made, to have a potential collision distance information as suggested by Strumolo into the system of Sleichter, for the benefit of more accurate to collision information.

Regarding to claims 2, 11: Sleichter further discloses the control signal activates a selected vibratory unit 12 based upon the direction of the identified threat relative to the vehicle [see col. 22, lines 1-8, 20-40].

Regarding to claims 3-4, 12-13 and 28-29: Sleichter further discloses the control signal 111 modulates a selected vibratory based upon the directional of a warning signal, and different vibrator intensity for in each of the directional aspects [col. 26, lines 1-8], except for not specifically discloses the vibrator intensity based upon the distance of the identified threat. Since control signal 111 capable to modulate the threat from different directions, one having ordinary skill in the art would have found it obvious for the control signal 111, to modulate vibrator intensity of the threat at different distances.

Regarding to claims 5-6, 15: Sleichter further discloses that vibrator units is located in harness 194 integrals to an article (fabric sleeve 207) worn by the operator [see Fig. 9, 7, col. 22, lines 55-67].

Regarding to claims 7-9, 14, 24-26: Sleichter further discloses that plurality of vibrator units is distributed on the operator's back with flexible material pad 14, and operator torso and legs (thigh) [see Fig. 1, col. 5, lines 64-67 and col. 9, lines 35-43], except for not specifically discloses that vibrator units is distributed on operator's head and comprises a vest surrounding

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the user's torso. Since, the vibrator pad 14 is integral to a flexible fabric capable to wear on operator's body such as legs, shoulder, back and etc., therefore it would have been obvious of one having ordinary skill in the would recognize that, vibrator pad 14 can be made as a flexible vest so operator can be wear on any appropriate part of hi/her body includes the head.

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Regarding to claim 27: Sleichter further discloses that wherein the position of a threat is mapped to one or more vibratory elements 12, that correspondingly directionally orienting tactile stimulus to the driver for easily able to visually identify the offending object [cited in col. 22, lines 3-8, 17-37], but lacks in specifically disclosing the mapped vibratory elements positioned in or near an axis extending from said body of the user to the threat. As long as, the threat direction can be identified by the driver, employing any position for performing the same function would not constitutes an inventive step, it is an obvious of matter of design choice. Therefore, it would have been obvious of one having ordinary skill in the art at the time the invention was made, to select the vibratory elements positioned near an axis extending from the body of user to the threat, for the purpose of easy to identify the threat direction.

Regarding to claims 16-20: The claimed method steps are interpreted and rejected as rejection stated above.

## Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Karell [US 6,091,321], Hirsch [US 3,736,551], Hall [US 6,223,125], Greene et al. [US 5,986,582] and Rosenberg et al. [US 6,580,417].

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang

SUPERVISORY PATENT EXAMINER

121/05